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Abstract

A data warehouse maintains its functions in three layers: staging, integration, and access. Staging is used to store raw data for use by developers (analysis and support). The integration layer is used to integrate data and to have a level of abstraction from users. The access layer is for getting data out for users.

This definition of the data warehouse focuses on data storage. The main source of the data is cleaned, transformed, catalogued and made available for use by managers and other business professionals for data mining, online analytical processing, market research and decision support. However, the means to retrieve and analyze data, to extract, transform and load data, and to manage the data dictionary are also considered essential components of a data warehousing system. Many references to data warehousing use this broader context. Thus, an expanded definition for data warehousing includes business intelligence tools, tools to extract, transform and load data into the repository, and tools to manage and retrieve metadata. Data Warehouse plays an important part in the process of knowledge engineering and decision-making for Enterprise, as a key component of the data warehouse architecture, the tool that support data extraction, transformation, loading is a critical success factor for any data warehouse projects.

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Index Terms

Computer Science

Wireless

Key words

Integration
Data Warehousing
heterogeneity
ETL
data extraction
cleaning and transformation